

nearest to that of the large extinct Edentata, the Mylodons; but the structure of the symphysial portion is unlike that of any other animal. Dr. Mantell will shortly present a memoir on this most interesting discovery to the Royal Society, in whose Transactions his first memoir on the Teeth of the Iguanodon was published in 1825. The lower jaw, containing teeth, was discovered by Captain Bickenden, the upper by Dr. Mantell: both are from the same locality in Tilgate Forest.

Description of a new British Mould. By GEORGE JOHNSTON, M.D. &c.

I am willing to believe, with my Lord Bacon, that Mould "is something between putrescence and a plant." It settles a much-mooted point as well as any other theory has yet done. Organic substance, in a state of decay, is Mould's fruitful matrix,—life from death,—the ever-yearning change from a worse to a better condition; for life, even in this its lowest state, is better certainly than sad corruption. And how beautiful are many Moulds, when, with the microscope, we discover Nature's handicraft in them to the eye of sense! We can scarcely but believe that they have a sort of enjoyment in their life, and in the evolution of their symmetrical figures. One sort is now vigorous and abundant on some plants in my little "Green-house," where it is as noxious as the Green-fly, or Aphis; and it is rather singular that the species has not been yet recorded as a British production. I have the high authority of the Rev. M. J. Berkeley for this fact, who informs me that our Mould is the *Botrytis umbellata** of DeCandolle.

Botrytis umbellata. On a flat and smooth leaf, the decumbent filaments of this Mould form a cobweb-like mycelium, but on leaves with an uneven surface, and on the stalks of herbs, the mycelium is so filamentous and thin as to be scarcely perceptible; while the erect filaments are so numerous as to render the surface downy or hirsute. The decumbent filaments are also slenderer than the others, but there is no difference in their structure; they are smooth hyaline membranous tubes jointed at distant intervals, the joints alternately swollen and constricted, but not regularly so, and when moistened with water, the whole tube becomes swollen, tense, and cylindrical. The erect filaments are two lines in height, of a gray or cinereous colour, with a hoary sporuliferous head; they are sparingly and irregularly branched, and at the top four or five short divergent branchlets form a sort of imperfect umbel, collecting, as it were, the sporules into a round heap or summit. The main branches are either divergent or dichotomous; and many of the filaments are quite simple. The sporules are ovate or elliptical, often marked with a septum, sometimes transversely, and in others in a longitudinal direction; and this septum disappears when the sporules are moistened. The number of sporules is incalculable; they fall from the head and are found adherent to every fibre of the plant; and when this is shaken, they fly abroad in a little cloud.

* Lam. et DeCand. Fl. Franç. ii. 71. Duby, Bot. Gall. ii. 921.

My friend Mr. Bowerbank examined this Mould with the microscope. When highly magnified, many of the main filaments exhibited slight protuberances, which were supposed to be incipient branches; these were sometimes opposed to each other, and sometimes they were not quite in opposition. The sporules varied considerably in size, and were ovate or elliptical. Placed in water between glasses, after a lapse of two days it was found that most of the sporules had germinated, each emitting a single filament, which was sparingly and irregularly branched, and contained some very minute granules.—*From the Transactions of the Berwickshire Naturalists' Club, vol. ii. p. 213.*

METEOROLOGICAL OBSERVATIONS FOR APRIL 1848.

Chiswick.—April 1. Foggy: very fine: clear. 2. Foggy in the morning: very fine. 3, 4. Slight fog: fine. 5. Fine. 6. Overcast: very fine. 7. Cloudy: rain at night. 8, 9. Rain. 10. Fine: rain at night. 11. Cloudy: rain. 12. Showery. 13. Overcast: heavy rain at night. 14. Clear and cold. 15. Foggy: rain. 16. Hazy and damp: cloudy: rain. 17. Showery. 18. Rain. 19. Cloudy: fine. 20. Fine: rain. 21. Drizzly: overcast: rain at night. 22. Rain: drizzly: partially overcast. 23. Fine: cloudy: slight rain. 24. Overcast: drizzly. 25. Densely clouded. 26. Fine. 27. Clear: shower: clear. 28. Cold rain: overcast: clear. 29. Overcast: fine. 30. Fine throughout.

Mean temperature of the month	47°·33
Mean temperature of April 1847	44 ·28
Mean temperature of April for the last twenty years	47 ·06
Average amount of rain in April	1·47 inch.

Boston.—April 1. Foggy. 2. Fine: thunder and lightning P.M. 3, 4. Fine. 5. Cloudy: rain P.M. 6. Fine: rain early A.M. 7. Fine. 8. Rain: rain A.M. and P.M. 9. Cloudy: rain A.M. 10. Cloudy: rain P.M. 11. Fine. 12. Cloudy: rain A.M. and P.M. 13. Rain: rain A.M. 14. Fine. 15. Cloudy. 16. Cloudy: rain P.M. 17. Cloudy: rain early A.M. 18. Cloudy: rain P.M. 19, 20. Fine: rain P.M. 21. Cloudy. 22. Cloudy: rain early A.M. 23. Cloudy: brisk wind: rain P.M. 24. Rain: rain A.M. 25. Rain: rain early A.M.: rain P.M. 26. Cloudy: hail and rain A.M. 27. Fine. 28. Cloudy. 29, 30. Fine.

Applegarth Manse, Dumfries-shire.—April 1. Fine spring day. 2. Fine spring day: one slight shower. 3. Fine spring day: rain P.M. 4. Fair, but cloudy. 5. Fair A.M.: rain P.M. 6. Fair A.M.: rain: hail. 7. Rain: frost A.M. 8. Showers: snow preceding night. 9. Fair: cloudy P.M. 10, 11. Frost A.M. 12. Cloudy: cleared. 13. Frost A.M. * 14. Frost: one shower. 15. Frost: very cold. 16. Cloudy and threatening. 17. Rain early A.M. 18. Slight rain early. 19. Fair and fine: thunder. 20. Fine: showers. 21. Rain early A.M. 22. Slight shower: rain P.M. 23. Fair and droughty. 24. Fair: rain P.M. 25. Showery. 26. Slight hail. 27. Frost, keen: rain P.M. 28. Hail: frequent showers. 29. Hail: frost. 30. Hard frost.

Mean temperature of the month	43°·2
Mean temperature of April 1847	43 ·4
Mean temperature of April for twenty-five years	44 ·2
Mean rain in April for twenty years	1·76 inch.

Sandwick Manse, Orkney.—April 1. Bright: cloudy. 2. Bright: drops. 3. Damp: drops. 4. Bright: showers. 5. Showers: aurora. 6. Sleet-showers: showers: sleet. 7. Clear: frost: aurora. 8. Clear: frost: snow-showers. 9. Snow-showers: clear: frost. 10—13. Clear. 14. Cloudy. 15. Bright: cloudy. 16. Bright: cloudy: drops. 17, 18. Damp. 19. Cloudy. 20. Damp. 21. Cloudy. 22. Clear: cloudy. 23, 24. Damp. 25. Cloudy: drops. 26. Snow-showers: clear. 27. Bright: cloudy. 28. Hail-showers. 29. Sleet-showers: hail-showers: aurora. 30. Bright: hail-showers: aurora.